

CLAIM AMENDMENTS

1. (Currently Amended) A camera comprising:

light emitting means that projects a beam of light onto an object to be measured;

~~light-receiving detecting~~ means that ~~receives~~ detects the light ~~reflected on~~
projected toward and reflected from the object at a ~~light-receiving detecting~~ position
corresponding to a distance to the object, and, based on the ~~light-receiving detecting~~
position, outputs a long-range side signal that increases in value as the object is
positioned ~~further away~~ farther from said camera at a certain intensity of the ~~received~~
detected light, and a short range side signal that increases in value as the object is
positioned closer to said camera at a certain intensity of the ~~received~~ detected light;

clamping means that compares ~~said the~~ long-range side signal with a clamp signal,
and, when ~~said the~~ long-range side signal is larger than ~~said the~~ clamp signal in value,
outputs said long-range side signal; and, when ~~said the~~ long-range side signal is smaller
than ~~said the~~ clamp signal in value, outputs ~~said the~~ clamp signal;

calculation means that calculates a ratio between ~~said the~~ short-range side signal
and ~~a the~~ signal output from said clamping means ~~to output~~ and outputs an output ratio
signal;

conversion means that compares ~~said the~~ output ratio signal with a predetermined
infinity determination threshold value ~~so as~~ to determine whether the value of ~~said the~~
output ratio signal corresponds to ~~the a~~ shorter range side rather than the value of ~~said the~~
infinity determination threshold value ~~or not, then in the former case and, if so,~~ converts
~~said the~~ output ratio signal into a distance signal that is correlated with the distance of the
object from said camera, and ~~in the latter case, if not,~~ converts ~~said the~~ output ratio signal
into a predetermined distance signal having a fixed value;

luminance measuring means that measures the luminance of ~~an~~ outside light; and

exposure control means that, when the luminance of the outside light measured by
said luminance measuring means is lower than a ~~predetermined~~ switchover luminance,
which is determined based on film sensitivity, controls ~~the aperture value of a lens~~
aperture to a fully open aperture value; and, when the luminance of the outside light is
higher than ~~said the~~ switchover luminance, ~~controls~~ increases the ~~aperture value of lens to~~
increase aperture according to the increase of the luminance of the outside light, wherein

~~said the~~ infinity determination threshold value ~~being~~ is set at the value that
corresponds to the shorter range side among a first auto-focus (AF) signal and a second
AF signal,

~~said~~the first AF signal-corresponding corresponds to the infinity determination distance that is ~~set up as the furthest~~ farthest distance measurable by said camera, ; and

~~said~~the second AF signal-being is determined based on-~~said~~ the switchover luminance.

2. (Currently Amended) A camera comprising:

light emitting means that projects a beam of light onto an object to be measured;

light-~~receiving~~ detecting means that ~~receives~~ detects the light-~~reflected on~~ projected toward and reflected from the object at a light-~~receiving~~ detecting position corresponding to a distance to the object, and, based on the light-~~receiving~~ detecting position, outputs a long-range side signal that increases in value as the object is positioned ~~further away~~ farther from said camera at a certain intensity of the-~~received~~ detected light, and a short-range side signal that increases in value as the object is positioned closer to said camera at a certain intensity of the-~~received~~ detected light;

clamping means that compares-~~said~~ the long-range side signal with a clamp signal, and, when-~~said~~ the long-range side signal is larger than-~~said~~ the clamp signal in value, outputs said long-range side signal; and, when-~~said~~ the long-range side signal is smaller than-~~said~~ the clamp signal in value, outputs-~~said~~ the clamp signal;

calculation means that calculates a ratio between-~~said~~ the short-range side signal and-~~a~~ the signal output from said clamping means-~~to output~~ and outputs an output ratio signal;

conversion means that compares-~~said~~ the output ratio signal with a predetermined infinity determination threshold value-~~so as to determine whether the value of-~~ said the output ratio signal corresponds to-~~the~~ a shorter range side rather than the value of-~~said~~ the infinity determination threshold value-~~or not, then in the former case and, if so,~~ converts ~~said~~ the output ratio signal into a distance signal that is correlated with the distance of the object from said camera, and-~~in the latter case, if not,~~ converts- ~~said~~ the output ratio signal into a predetermined distance signal having a fixed value;

luminance measuring means that measures the luminance of-~~an~~ outside light; and

exposure control means that, when the luminance of the outside light measured by said luminance measuring means is lower than a-~~predetermined~~ switchover luminance, which is determined based on film sensitivity, controls-~~the aperture value of a lens~~ aperture to a fully open aperture value; and, when the luminance of the outside light is higher than-~~said~~ the switchover luminance, controls increases the-~~aperture value of lens to~~

~~increase aperture~~ according to ~~the increase of~~ the luminance of the outside light, wherein

a second AF signal value corresponding to ~~said the~~ switchover luminance is set up as ~~said the~~ infinity determination threshold value, and

an infinity signal value, which is a distance signal value corresponding to ~~a~~ an infinity set distance, is within ~~the range of~~ a distance signal value corresponding to ~~the~~ a range of a permissible circle of confusion in ~~the~~ an infinity determination distance, which is ~~the nearest distance in the distance of distances~~ subjected to ~~the~~ an infinity determination.

3. (Currently Amended) The camera according to Claim 1, wherein ~~said the~~ AF signal is ~~said the~~ output ratio signal.

4. (Currently Amended) The camera according to Claim 1, wherein an aperture in said camera is regulated to ~~contract~~ decrease as ~~said the~~ aperture value increases.

5. (Currently Amended) The camera according to Claim 1, wherein ~~in case said,~~ when the infinity determination threshold value is set at the value of ~~said the~~ second AF signal, ~~said a~~ fixed value of ~~said the~~ predetermined distance signal is within ~~the~~ a range of a permissible circle of confusion of said camera when the object is placed at ~~the~~ a point that yields ~~said the~~ infinity determination threshold value.